

FIG. 1

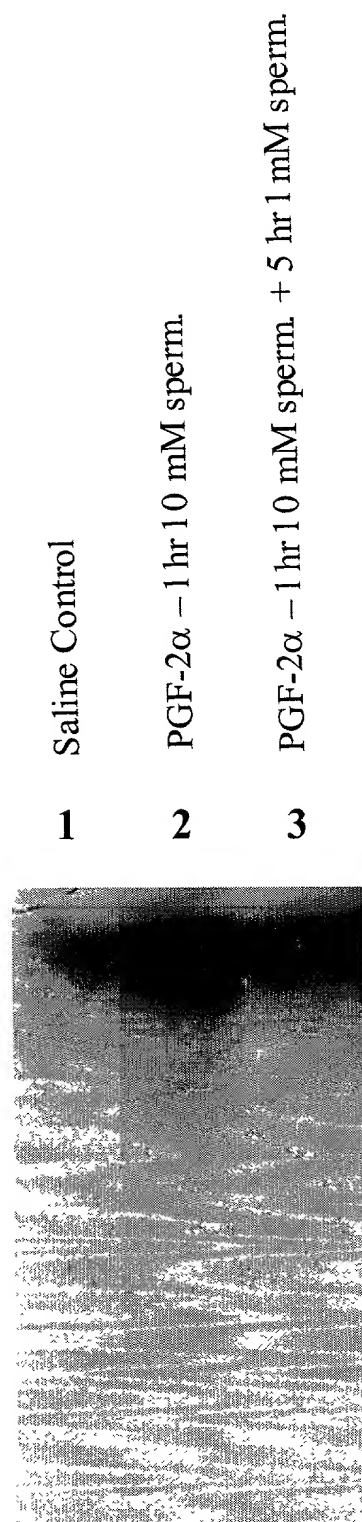
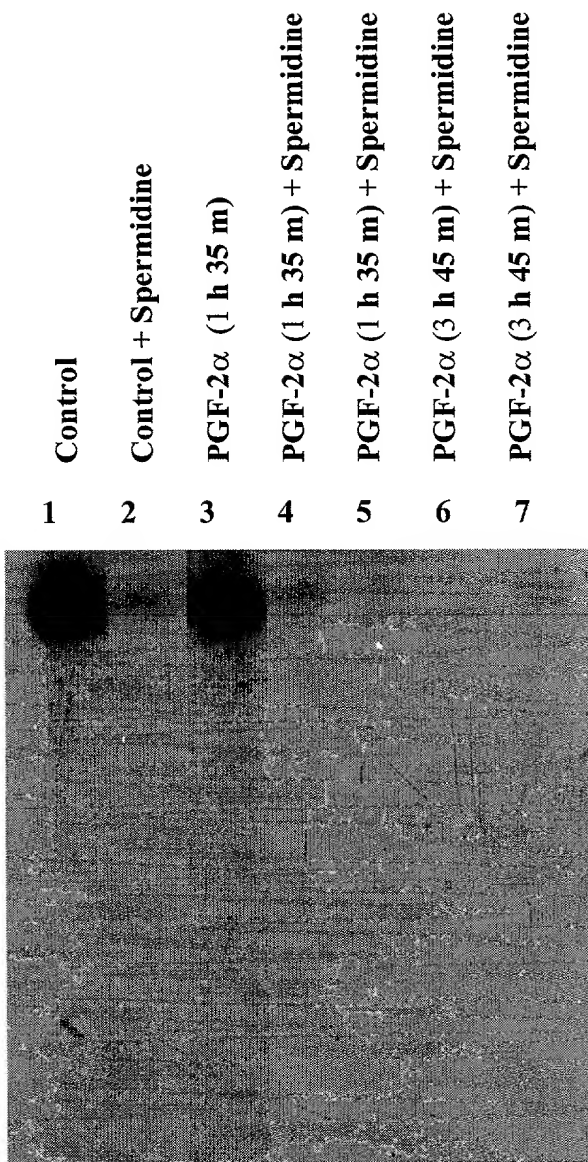


FIG. 2



TCGAAGACCGGTAAGCACGGCCATGCCAAGGTCCATCTGGTTGGTATTGATATTTTACTGGGAAGAAATAT
 S K T G K H G H A K V H L V G I D I F T G K K Y
 GAAGATATCTGCCCCTCGACTCATAACATGGATGTCCCCAACATCAAAAGGAATGATTTCCAGCTGATTGGC
 E D I C P S T H N M D V P N I K R N D F Q L I G
 ATCCAGGATGGGTACCTATCCCTGCTCCAGGACAGTGGGGAGGTACGAGAGGACCTTCGTCTGCCTGAGGGA
 I Q D G Y L S L L Q D S G E V R E D L R L P E G
 GACCTTGGCAAGGAGATTGAGCAGAAGTATGACTGTGGAGAAGAGATCCTGATCACAGTGCTGTCCGCCATG
 D L G K E I E Q K Y D C G E E I L I T V L S A M
 ACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAA**TAA**CTGGCTTCCAGGGTGGCGGTGGTGGCAGCA
 T E E A A V A I K A M A K
 GTGATCCATGAGCCTACAGAGGCCCTCCCCAGCTCTGGCTGGGCCCTTGGCTGGACTCCTATCCAATTTA
 TTTGACGTTTTATTTTGGTTTTCTCACCCCTTCAAACCTGTCGGGGAGACCCTGCCCTTCACCTAGCTCCCT
 TGGCCAGGCATGAGGGAGCCATGGCCTTGGTGAAGCTACCTGCCTCTTCTCTCGCAGCCCTGATGGGGGAAA
 GGGAGTGGGTACTGCCTGTGGTTTAGGTTCCCTCTCCCTTTTCTTTTAATTCAATTTGGAATCAGAAAG
 CTGTGGATTCTGGCAAATGGTCTTGTGTCCTTTATCCCACTCAAACCCATCTGGTCCCCTGTTCTCCATAGT
 CCTTCACCCCCAAGCACCCTGACAGACTGGGGACCAGCCCCCTTCCCTGCCTGTGTCTTCCCAAACCCC
 TCTATAGGGGTGACAAGAAGAGGAGGGGGGAGGGGACACGATCCCTCCTCAGGCATCTGGGAAGGCCCTTGC
 CCCCATGGGCTTTACCTTTTCTGTGGGCTTTCTCCCTGACACATTGTTAAAAATCAAACCTGAATAAAAC
 TACAAGTTTAATATGAAAAAAAAAAAAAAAAAAAAA
 (972 NT, 109 aa)

Figure 3

rat vs. mouse (BC003889) 98.3% identity (coding)

	10	20	30	40	50	60
rat	ATGGCAGATGATTTGGACTTCGAGACAGGAGATGCAGGGGCCTCAGCCACCTTCCCAATG					
	::					
mouse	ATGGCAGATGATTTGGACTTCGAGACAGGAGATGCAGGGGCCTCAGCCACCTTCCCAATG					
	10	20	30	40	50	60
rat	70	80	90	100	110	120
	CAGTGCTCAGCATTACGTAAGAATGGTTTTGTGGTGCTCAAGGGCCGCCATGTAAGATC					
	::					
mouse	CAGTGCTCAGCATTACGTAAGAATGGTTTTGTGGTGCTCAAGGGCCGCCATGTAAGATC					
	70	80	90	100	110	120
rat	130	140	150	160	170	180
	GTCGAGATGTCTACTTCGAAGACTGGCAAGCATGGCCATGCCAAGGTCCATCTGGTTGGT					
	::					
mouse	GTCGAGATGTCTACTTCGAAGACTGGCAAGCATGGCCATGCCAAGGTCCATCTGGTTGGC					
	130	140	150	160	170	180
rat	190	200	210	220	230	240
	ATTGATATTTTTACTGGGAAGAAATATGAAGATATCTGCCCCGTCGACTCATAACATGGAT					
	::::: ::					
mouse	ATTGACATTTTTACTGGGAAGAAATATGAAGATATCTGCCCCGTCGACTCATAATATGGAT					
	190	200	210	220	230	240
rat	250	260	270	280	290	300
	GTCCCCAACATCAAAGGAATGATTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCC					
	::					
mouse	GTCCCCAACATCAAACGGAATGACTTCCAGCTGATTGGCATCCAGGATGGGTACCTATCC					
	250	260	270	280	290	300
rat	310	320	330	340	350	360
	CTGCTCCAGGACAGTGGGGAGGTACGAGAGGACCTTCGTCTGCCTGAGGGAGACCTTGGC					
	::					
mouse	CTGCTCCAGGACAGTGGGGAGGTACGAGAGGACCTTCGTCTGCCTGAAGGAGACCTTGGC					
	310	320	330	340	350	360
rat	370	380	390	400	410	420
	AAGGAGATTGAGCAGAAGTATGACTGTGGAGAAGAGATCCTGATCACAGTGCTGTCCGCC					
	::					
mouse	AAGGAGATTGAGCAGAAGTATGACTGTGGAGAAGAGATCCTGATCACAGTGCTGTCTGCC					
	370	380	390	400	410	420
rat	430	440	450	460		
	ATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAA					
	::					
mouse	ATGACAGAGGAGGCAGCTGTTGCAATCAAGGCCATGGCAAAA					
	430	440	450	460		

Figure 8

rat vs. human(BC000751 or NM_001970) 100.0% identity

```

      10      20      30      40      50      60
rat   MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      .....
human MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      10      20      30      40      50      60

      70      80      90     100     110     120
rat   IDIFTGKKYEDICPSTHNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLG
      .....
human IDIFTGKKYEDICPSTHNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLG
      70      80      90     100     110     120

      130     140     150
rat   KEIEQKYDCGEEILITVLSAMTEEA AAIKAMAK
      .....
human KEIEQKYDCGEEILITVLSAMTEEA AAIKAMAK
      130     140     150
```

Figure 9

rat vs. human(NM_020390) 82.5% identity

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      10      20      30      40      50      60
rat   MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      .....
human MADEIDFTTGDAGASSTYPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      10      20      30      40      50      60

      70      80      90     100     110     120
rat   IDIFTGKKYEDICPSTHNMDVPNIKRNDQFLIGIQDGYLSLLQDSGEVREDLRLPEGDLG
      .....
human IDIFTGKKYEDICPSTHNMDVPNIKRNDYQLICIQDGYLSLLTETGEVREDLKLPEGELG
      70      80      90     100     110     120

      130     140     150
rat   KEIEQKYDCGEEILITVLSAMTEEA AVAIKAMAK
      .... :
human KEIEGKYNAGEDVQVSVCMAMSE EYAVA IKP-CK
      130     140     150
```

Figure 10

rat vs. mouse (BC003889)100.0% identity

```

      10      20      30      40      50      60
rat   MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      .....
mouse MADDLDFETGDAGASATFPMQCSALRKNGFVVLKGRPCKIVEMSTSKTGKHGHAKVHLVG
      10      20      30      40      50      60

      70      80      90     100     110     120
rat   IDIFTGKKYEDICPSTHNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLG
      .....
mouse IDIFTGKKYEDICPSTHNMDVPNIKRNDFQLIGIQDGYLSLLQDSGEVREDLRLPEGDLG
      70      80      90     100     110     120

      130     140     150
rat   KEIEQKYDCGEEILITVLSAMTEEA AVAIKAMAK
      .....
mouse KEIEQKYDCGEEILITVLSAMTEEA AVAIKAMAK
      130     140     150
```

Figure 11

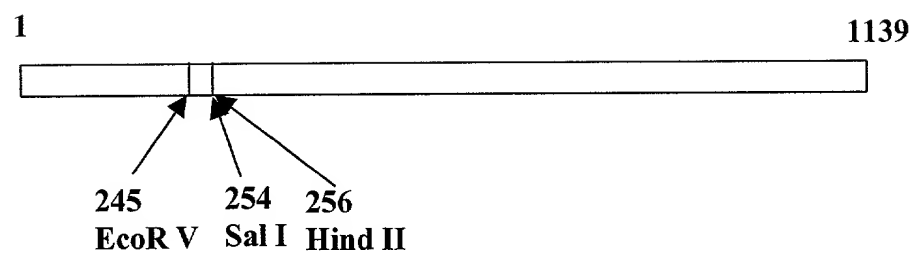


Figure 12

Southern Blot of Rat Genomic DNA

EcoRV



Rat eIF-5A 1139 bp

EcoR1 EcoRV BamH1

**Full-length
rat eIF-5A
cDNA probe**

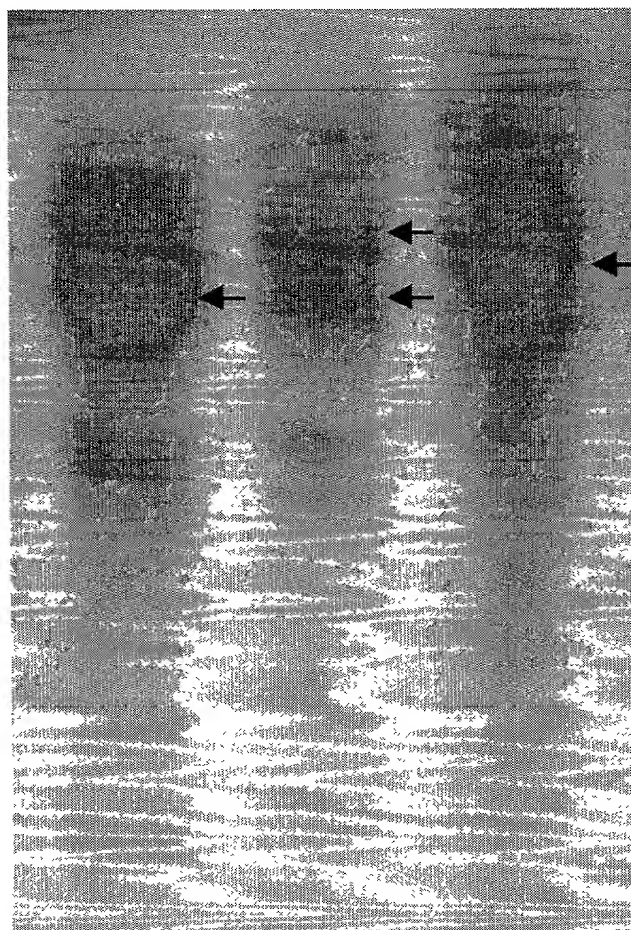


FIG. 13

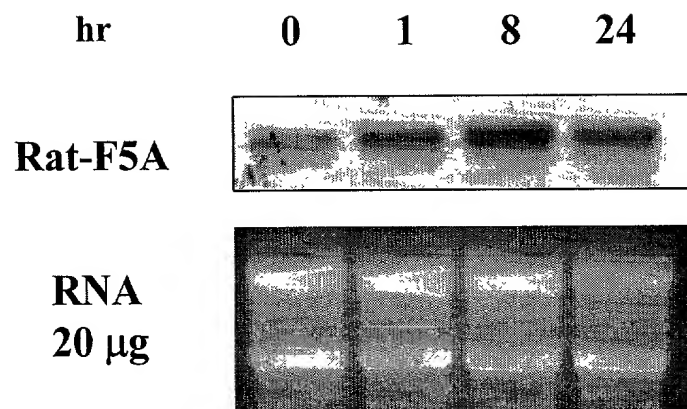


Figure 14

GCTGTGTATTATTGGGCCCATAGAACCACATACCTGTGCTGAGTCCTGCACTCACAGACGGCTCACTGGGT
 A V Y Y W A H K N H I P V L S P A L T D G S L G
 GACATGATCTTTTTCCATTCCCTATAAAAAACCCAGGCTTGGTCCTGGACATCGTTGAAGACCTGCGGCTCATC
 D M I F F H S Y K N P G L V L D I V E D L R L I
 AACATGCAGGCCATTTTCGCCAAGCGCACTGGGATGATCATCCTGGGTGGAGGCGTGGTCAAGCACCACATC
 N M Q A I F A K R T G M I I L G G G V V K H H I
 GCCAATGCTAACCTCATGCGGAATGGAGCTGACTACGCTGTTTATATCAACACAGCCCAGGAGTTTGATGGC
 A N A N L M R N G A D Y A V Y I N T A Q E F D G
 TCAGACTCAGGAGCCCGGCCAGATGAGGCTGTCTCCTGGGGCAAGATCCGGATGGATGCACAGCCAGTAAAG
 S D S G A R P D E A V S W G K I R M D A Q P V K
 GTCTATGCTGATGCATCTCTGGTTTTCCCCTTGCTGGTGGCTGAGACATTCGCCCCAAAAGGCAGATGCCTTC
 V Y A D A S L V F P L L V A E T F A Q K A D A F
 AGAGCTGAGAAGAATGAGGACT**AG**AGCAGATGGGTAAAGACGGAGGCTTCTGCCACACCTTTATTTATTATTT
 R A E K N E D
 GCATACCAACCCCTCCTGGGCCCTCTCCTTGGTCAGCAGCATCTTGAGAATAAAATGGCCTTTTTTGTTGGTTT
 CTGTAAAAAAAGGACTTTAAAAA

(606 NT, 151 aa)

Figure 15

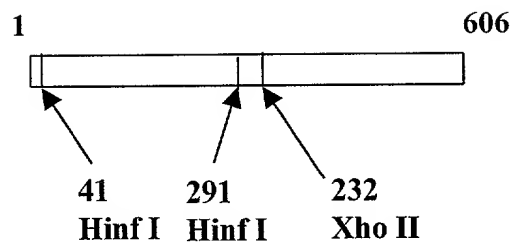


Figure 16

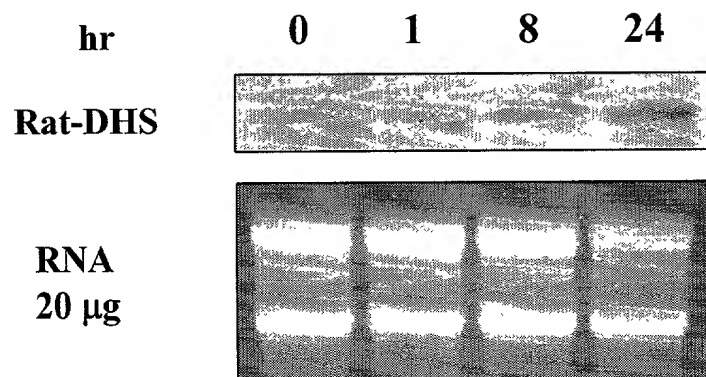


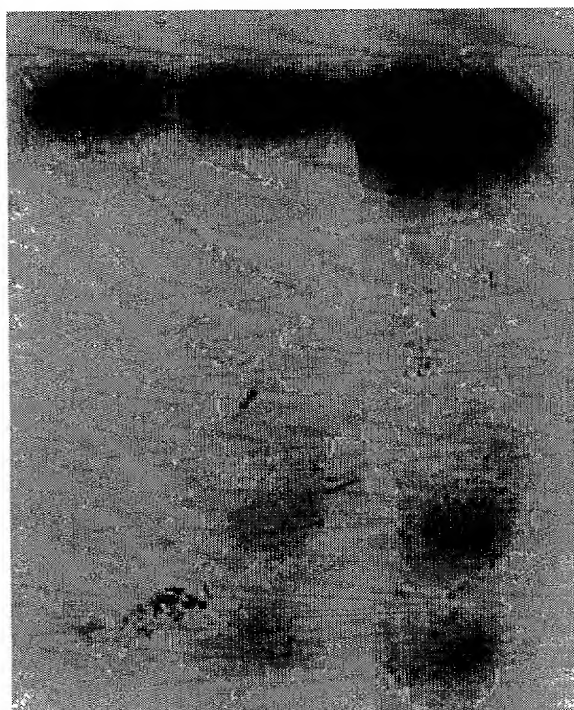
Figure 17

[illegible][illegible][illegible]

FIG. 19

Hours After PGF-2 α Treatment

0 1 24



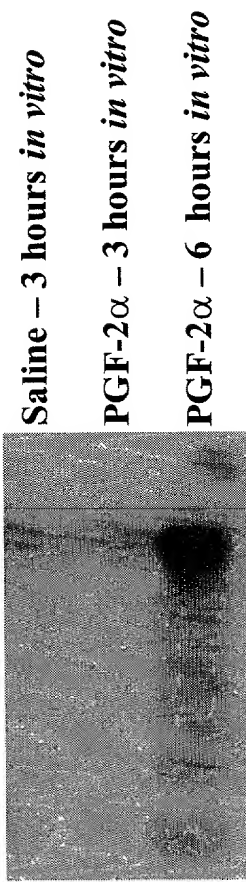
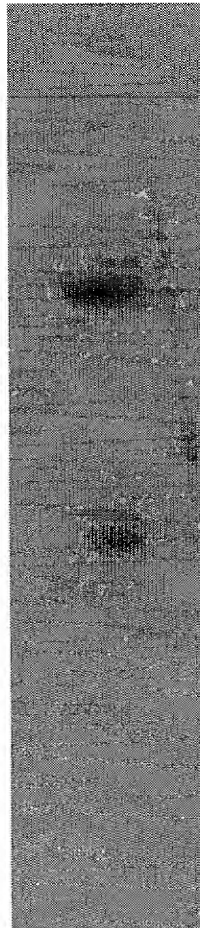


Figure 20

FIG. 21

Southern Blot of Rat Genomic DNA

EcoRV



**Partial rat DHS
cDNA probe**